

STIC Search

lucas - 10 / 062954

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(FILE 'HOME' ENTERED AT 08:24:47 ON 07 JAN 2004)
SET COST OFF

FILE 'REGISTRY' ENTERED AT 08:24:59 ON 07 JAN 2004
E BOTOX/CN

L1 1 S E3
E BOTULIN/CN
L2 1 S E3
E BOTULIN
L3 2156 S E3,E4,E7
E CLOSTRIDIUM
L4 16633 S E3-E7
L5 2096 S L1-L3 AND L4
L6 2156 S L1-L3,L5
L7 14537 S L4 NOT L6

FILE 'HCAPLUS' ENTERED AT 08:26:45 ON 07 JAN 2004
E ACUPUNCTURE/CW
E ACUPUNCTURE/CW

L8 894 S E3
E ACUPUNCTURE/CT
L9 894 S E3-E5
E E3+ALL
L10 894 S L8,L9
E ACUPUNCT
L11 1092 S E4-E13
L12 1092 S L8-L11
L13 1570 S L6
L14 9110 S L7
L15 98 S BOTOX
L16 4505 S BOTULINUM
L17 22469 S CLOSTRIDIUM
E BOTULIN/CT
L18 1171 S E3-E8
E E8+ALL
E E2+ALL
L19 716 S E4
L20 528 S E3
L21 1774 S BOTULIN
E CLOSTRIDIUM/CT
L22 1646 S E39-E46
E E39+ALL
L23 80 S E7/BI
L24 3 S L12 AND L13-L23
L25 2 S L24 AND PAIN
E SPINE/CT
E E3+ALL
E E3+ALL
L26 3325 S E9
E E15+ALL
L27 23756 S E4
E E9+ALL
L28 3882 S E5,E4+NT
E LAMB G/AU
L29 13 S E3,E5,E45,E47,E48
L30 2 S L29 AND L12
L31 2 S L29 AND L13-L28
L32 1 S L29 AND L26-L28
L33 2 S L30-L32
L34 2 S L25,L33
L35 91 S L26-L28 AND L12

L36 164 S L26-L28 AND L13-L23
 L37 1 S L35 AND L36
 L38 67 S L35,L36 AND (?MUSCL? OR ?MUSCUL?)
 L39 31 S L38 AND (NEEDL? OR SYRING? OR INJECT?)
 SEL DN AN 1 5 7 31
 L40 4 S E1-E12 AND L39
 L41 5 S L34,L37,L40 AND L8-L40
 L42 48 S L35,L36 AND PAIN
 E PAIN/CT
 L43 11328 S E3-E14
 E E3+ALL
 L44 11167 S E3
 E E12+ALL
 L45 1494 S E11,E12,E10+NT
 E NOCICEPT?
 E NOCICEP?
 L46 8876 S NOCICEP?
 E ANALGES/CT
 E E4+NT
 E E1+ALL
 L47 9081 S E3
 L48 30593 S E5
 L49 412 S L12-L23 AND L43-L48
 L50 65 S L49 AND L26-L28
 L51 16 S L50 AND (?MUSCL? OR ?MUSCUL?)
 L52 28 S L50 AND (INJECT? OR SYRING? OR NEEDL?)
 L53 43 S L50 AND L12
 L54 2 S L51 AND L52,L53
 L55 1 S L54 NOT HEPARIN
 L56 72 S L42,L50-L53
 L57 70 S L56 NOT L41
 SEL DN AN 23 28
 L58 2 S E1-E6
 L59 7 S L41,L55,L58 AND L8-L48
 L60 72 S L56 AND (?SPINE? OR ?SPINAL?)
 L61 4 S L59 AND L60
 L62 7 S L59 AND (?SPINE? OR ?SPINAL?)
 L63 7 S L61,L62
 SEL HIT RN

FILE 'REGISTRY' ENTERED AT 09:00:26 ON 07 JAN 2004

L64 9 S E7-E15 AND L1-L7

=> fil reg

FILE 'REGISTRY' ENTERED AT 09:00:49 ON 07 JAN 2004

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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 5 JAN 2004 HIGHEST RN 634558-38-6

DICTIONARY FILE UPDATES: 5 JAN 2004 HIGHEST RN 634558-38-6

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more

information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

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L64 ANSWER 1 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN 107231-16-3 REGISTRY
CN Botulin G (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Botulin toxin G
CN Botulinum toxin G
CN Toxin, botulin, G
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
72 REFERENCES IN FILE CA (1907 TO DATE)
6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
72 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:8814
REFERENCE 2: 139:358792
REFERENCE 3: 139:255365
REFERENCE 4: 139:129339
REFERENCE 5: 139:128046
REFERENCE 6: 139:122752
REFERENCE 7: 139:122751
REFERENCE 8: 139:41797
REFERENCE 9: 138:348739
REFERENCE 10: 138:265639

L64 ANSWER 2 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN 107231-15-2 REGISTRY
CN Botulin F (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Botulin F toxin
CN Botulinum toxin f
MF Unspecified
CI MAN
SR CA
LC STN Files: ANABSTR, CA, CAPLUS, CHEMCATS, CSCHEM, IPA, TOXCENTER, USPAT2, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
118 REFERENCES IN FILE CA (1907 TO DATE)
8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
119 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:8814
REFERENCE 2: 139:358792

REFERENCE 3: 139:281298

REFERENCE 4: 139:259617

REFERENCE 5: 139:255365

REFERENCE 6: 139:211428

REFERENCE 7: 139:160870

REFERENCE 8: 139:147994

REFERENCE 9: 139:132453

REFERENCE 10: 139:129339

L64 ANSWER 3 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 107231-13-0 REGISTRY

CN Botulin C1 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Botulinum toxin C1

CN C1 botulin toxin

CN Toxin, botulin, C1

MF Unspecified

CI MAN

SR CA

LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

72 REFERENCES IN FILE CA (1907 TO DATE)

5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

72 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:8814

REFERENCE 2: 139:358792

REFERENCE 3: 139:345943

REFERENCE 4: 139:147994

REFERENCE 5: 139:129339

REFERENCE 6: 139:128333

REFERENCE 7: 139:122752

REFERENCE 8: 139:122751

REFERENCE 9: 138:363048

REFERENCE 10: 138:333062

L64 ANSWER 4 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 107231-12-9 REGISTRY

CN Botulin (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Toxins, botulin

MF Unspecified

CI MAN

SR CA

LC STN Files: ADISNEWS, AGRICOLA, BIOBUSINESS, BIOSIS, CA, CAPLUS, CEN,

CIN, PIRA, PROMT, TOXCENTER, USPAT2, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

523 REFERENCES IN FILE CA (1907 TO DATE)

15 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

528 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:12389

REFERENCE 2: 140:8814

REFERENCE 3: 140:8762

REFERENCE 4: 139:386257

REFERENCE 5: 139:376587

REFERENCE 6: 139:358792

REFERENCE 7: 139:334208

REFERENCE 8: 139:316346

REFERENCE 9: 139:302954

REFERENCE 10: 139:296940

L64 ANSWER 5 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 93384-47-5 REGISTRY

CN Botulin E (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Botulinum toxin E

CN Toxin, botulin, E

MF Unspecified

CI MAN

SR Commission of European Communities

LC STN Files: ANABSTR, BIOSIS, CA, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM,
TOXCENTER, USPAT2, USPATFULL

Other Sources: EINECS**

(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

212 REFERENCES IN FILE CA (1907 TO DATE)

9 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

212 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:8814

REFERENCE 2: 139:358792

REFERENCE 3: 139:345943

REFERENCE 4: 139:281298

REFERENCE 5: 139:255365

REFERENCE 6: 139:211428

REFERENCE 7: 139:147994

REFERENCE 8: 139:132453

REFERENCE 9: 139:129339

REFERENCE 10: 139:128333

L64 ANSWER 6 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN 93384-46-4 REGISTRY

CN Botulin D (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Botulin toxin D

CN Botulinum toxin D

CN Toxin, botulin, D

MF Unspecified

CI MAN

SR Commission of European Communities

LC STN Files: BIOSIS, CA, CAPLUS, CHEMLIST, CSCHEM, RTECS*, TOXCENTER,
USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: EINECS**

(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

124 REFERENCES IN FILE CA (1907 TO DATE)

8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

124 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:13917

REFERENCE 2: 140:8814

REFERENCE 3: 139:379607

REFERENCE 4: 139:358792

REFERENCE 5: 139:345943

REFERENCE 6: 139:318891

REFERENCE 7: 139:281298

REFERENCE 8: 139:255365

REFERENCE 9: 139:147994

REFERENCE 10: 139:129339

L64 ANSWER 7 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 93384-45-3 REGISTRY

CN Botulin C (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Botulin toxin C

CN Toxin, botulin, C

MF Unspecified

CI MAN

SR Commission of European Communities

LC STN Files: ANABSTR, CA, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, TOXCENTER,
USPAT2, USPATFULL

Other Sources: EINECS**

(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

101 REFERENCES IN FILE CA (1907 TO DATE)

4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

101 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:379607

REFERENCE 2: 139:317391

REFERENCE 3: 139:281298

REFERENCE 4: 139:255365

REFERENCE 5: 139:244794

REFERENCE 6: 139:207733

REFERENCE 7: 139:128046

REFERENCE 8: 139:41797

REFERENCE 9: 139:30808

REFERENCE 10: 138:397330

L64 ANSWER 8 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 93384-44-2 REGISTRY

CN Botulin B (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Botulin toxin B

CN Botulinum toxin B

CN Myobloc

CN NeuroBloc

MF Unspecified

CI MAN

SR Commission of European Communities

LC STN Files: ANABSTR, BIOSIS, CA, CAPLUS, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, IPA, MRCK*, RTECS*, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: EINECS**

(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

286 REFERENCES IN FILE CA (1907 TO DATE)

12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

287 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:8814

REFERENCE 2: 139:392360

REFERENCE 3: 139:381727

REFERENCE 4: 139:376528

REFERENCE 5: 139:376523

REFERENCE 6: 139:358792

REFERENCE 7: 139:354230

REFERENCE 8: 139:345943

REFERENCE 9: 139:345817

REFERENCE 10: 139:281298

L64 ANSWER 9 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 93384-43-1 REGISTRY
CN Botulin A (9CI) (CA INDEX NAME)

OTHER NAMES:

CN AGN 191622
CN Botox
CN Botulin neurotoxin A
CN Botulin toxin A
CN Botulinium toxin type A
CN Botulinum toxin A
CN Botulinum toxin type A

CN Dysport

CN Oculinum

MF Unspecified

CI MAN

SR Commission of European Communities

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DIOGENES, EMBASE, IMSCOSEARCH, IMSDRUGNEWS, IMSRESEARCH, IPA, MRCK*, PHAR, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: EINECS**

(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

713 REFERENCES IN FILE CA (1907 TO DATE)

21 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

716 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:13917

REFERENCE 2: 140:8814

REFERENCE 3: 139:381727

REFERENCE 4: 139:363638

REFERENCE 5: 139:360806

REFERENCE 6: 139:358792

REFERENCE 7: 139:358643

REFERENCE 8: 139:354230

REFERENCE 9: 139:345943

REFERENCE 10: 139:345817

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 09:00:59 ON 07 JAN 2004

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FILE COVERS 1907 - 7 Jan 2004 VOL 140 ISS 2
FILE LAST UPDATED: 6 Jan 2004 (20040106/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all tot 163

L63 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:610292 HCAPLUS
DN 139:128046
ED Entered STN: 08 Aug 2003
TI Method using **botulinum** toxin for treatment of **pain**
IN Lamb, Gregory B.
PA 1474791 Ontario Limited, Can.
SO PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K039-08
CC 1-11 (Pharmacology)
Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003063898	A2	20030807	WO 2003-CA127	20030129
	WO 2003063898	A3	20031002		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRAI CA 2002-2369810 A 20020130

AB A method of treating **pain** is provided. The method comprises administering to the intrinsic **spinal muscles** of a mammal an amount of a toxin, especially **botulinum** toxin, sufficient to paralyze the **muscles**. This prevents the **muscles** from shortening and can allow healing to occur. The paralyzing agent may use in combination with a growth factor to treat **spinal** compression. A kit for the treatment of **pain** by injection of the intrinsic **spinal muscles** is also provided. The kit comprises a paralyzing agent, an **injection syringe** with **needle**, and an **acupuncture needle** with **injector system**.

ST **botulinum** toxin analgesic intrinsic **spinal muscle** paralysis

IT **Analgesics**

Muscle relaxants

Needles (tools)

Pain

(**botulinum** toxin for treatment of **pain**)

IT **Spinal cord**
(cervical; **botulinum** toxin for treatment of **pain**)

IT Spinal column, disease
(degenerated spinal disk; **botulinum** toxin for treatment of pain)

IT Spinal column, disease
(facet joint disease of the spine; **botulinum** toxin for treatment of pain)

IT Drug delivery systems
(injections; **botulinum** toxin for treatment of pain)

IT Spinal column, disease
(intervertebral disk hernia; **botulinum** toxin for treatment of pain)

IT Muscle
Paralysis
Spinal column
(intrinsic spinal muscle paralysis; **botulinum** toxin for treatment of pain)

IT Anesthetics
(local; **botulinum** toxin for treatment of pain, and use with other agents)

IT Spinal cord
(lumbar; **botulinum** toxin for treatment of pain)

IT Acupuncture
(needles; **botulinum** toxin for treatment of pain)

IT Nerve, disease
(neuropathy, myofascial compression/traction neuropathy of the spine; **botulinum** toxin for treatment of pain
)

IT Spinal column, disease
(spinal compression; **botulinum** toxin for treatment of pain)

IT Spinal column, disease
(spinal stenosis; **botulinum** toxin for treatment of pain)

IT Spinal cord
(thoracic; **botulinum** toxin for treatment of pain)

IT Growth factors, animal
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tissue growth factor; **botulinum** toxin for treatment of pain, and use with other agents)

IT 93384-43-1, Botulin A 93384-44-2,
Botulin B 93384-45-3, Botulin C
93384-46-4, Botulin D 93384-47-5,
Botulin E 107231-12-9, Botulin
107231-15-2, Botulin F 107231-16-3,
Botulin G
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**botulinum** toxin for treatment of pain)

IT 137-58-6, Xylocaine 38396-39-3, Marcaine 98717-15-8, Naropin
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**botulinum** toxin for treatment of pain, and use with other agents)

L63 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:590600 HCAPLUS
DN 139:138743
ED Entered STN: 01 Aug 2003
TI **Botulinum** toxin for treating pain
IN Lamb, Gregory Blair

PA Can.
 SO U.S. Pat. Appl. Publ., 9 pp.
 CODEN: USXXCO

DT Patent

LA English

IC ICM A61K039-08

ICS A61K038-18

NCL 424239100; 514012000

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003143249	A1	20030731	US 2002-62954	20020131
PRAI	US 2002-62954		20020131		

AB A method for treatment of **pain** comprising administering to the intrinsic **spinal** muscles of a mammal a paralyzing agent, i.e., **botulinum** toxin, is described. The method further comprises the administration of a local anesthetic and a tissue growth factor to enhance healing. A kit containing **botulinum** toxin, saline, a syringe with needle for dispensing saline into toxin, an **acupuncture** needle with **spinal acupuncture** injector system, and least one injection syringe is also provided.

ST **botulinum** toxin injection **spinal** muscle paralysis
pain

IT Toxoids

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (botulin; **botulinum** toxin injection to intrinsic
spinal muscles for **pain** treatment)

IT Human

Pain

(**botulinum** toxin injection to intrinsic **spinal**
 muscles for **pain** treatment)

IT Growth factors, animal

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (combination with; **botulinum** toxin injection to intrinsic
spinal muscles for **pain** treatment)

IT Drug delivery systems

(injections, i.m.; **botulinum** toxin injection to intrinsic
spinal muscles for **pain** treatment)

IT Anesthetics

(local, combination with; **botulinum** toxin injection to
 intrinsic **spinal** muscles for **pain** treatment)

IT Muscle

(**spinal**; **botulinum** toxin injection to intrinsic
spinal muscles for **pain** treatment)

IT 137-58-6, Xylocaine 38396-39-3, Marcaine 98717-15-8, Naropin

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (combination with; **botulinum** toxin injection to intrinsic
spinal muscles for **pain** treatment)

L63 ANSWER 3 OF 7 HCPLUS COPYRIGHT 2004 ACS on STN

AN 2002:595499 HCPLUS

DN 137:145554

ED Entered STN: 09 Aug 2002

TI Methods of administering **botulinum** toxin

IN Walker, Patricia S.

PA Allergan Sales, Inc., USA

SO U.S. Pat. Appl. Publ., 33 pp., Cont.-in-part of U. S. Ser. No. 730,237.
 CODEN: USXXCO

DT Patent

LA English

IC ICM A61K048-00
ICS A61K038-16

NCL 514012000

CC 63-5 (Pharmaceuticals)

Section cross-reference(s): 1, 62

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002107199	A1	20020808	US 2002-51952	20020117
	US 2002086036	A1	20020704	US 2000-730237	20001205
PRAI	US 2000-730237	A2	20001205		

AB Methods for treating conditions in an animal or human subject are disclosed. The conditions may be **pain**, skeletal **muscle** conditions, smooth **muscle** conditions, glandular conditions and cosmetic conditions. The methods comprise the step of administering a **Clostridium** neurotoxin component or **Clostridium** neurotoxin component-encoding DNA to the subject using a **needleless syringe**.

ST **botulinum** toxin **syringe** administration skin sequence

IT Gene, microbial

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation)
(BoNT/A-L; administration of **botulinum** toxin)

IT Nerve, disease

(achalasia; administration of **botulinum** toxin)

IT DNA sequences

Gene therapy

Headache

Human

Ice

Molecular cloning

Transformation, genetic

Tremor

(administration of **botulinum** toxin)

IT Fusion proteins (chimeric proteins)

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation)
(administration of **botulinum** toxin)

IT Skin, disease

(aging, wrinkles; administration of **botulinum** toxin)

IT Intestine

(anus, anismus; administration of **botulinum** toxin)

IT Intestine

(anus, fissure; administration of **botulinum** toxin)

IT Mouth, disease

(bruxism; administration of **botulinum** toxin)

IT Drug delivery systems

(carriers; administration of **botulinum** toxin)

IT **Spinal cord**

(cervical, dystonia; administration of **botulinum** toxin)

IT Appetite

(disorder, dysphagia; administration of **botulinum** toxin)

IT Skin

(drug delivery to; administration of **botulinum** toxin)

IT Nervous system, disease

(dystonia, of larynx; administration of **botulinum** toxin)

IT Larynx

(dystonia; administration of **botulinum** toxin)

IT Head

(face, spasm; administration of **botulinum** toxin)

IT **Muscle**, disease

(fibromyalgia; administration of **botulinum** toxin)

IT Hand

(focal hand dystonia; administration of **botulinum** toxin)

IT Drug delivery systems
(implants; administration of **botulinum** toxin)

IT Eye
(lid, blepharospasm; administration of **botulinum** toxin)

IT Eye
(lid, disorders; administration of **botulinum** toxin)

IT Tongue
(lingual dystonia; administration of **botulinum** toxin)

IT **Syringes**
(needleless; administration of **botulinum** toxin)

IT Bladder, disease
(neurogenic bladder; administration of **botulinum** toxin)

IT **Clostridium botulinum**
(neurotoxin of; administration of **botulinum** toxin)

IT **Clostridium butyricum**
Clostridium difficile
(neurotoxin; administration of **botulinum** toxin)

IT Toxins
RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(neurotoxins; administration of **botulinum** toxin)

IT Head, disease
(oromandibular dysphonia; administration of **botulinum** toxin)

IT Gastric juice
Mucus
Saliva
(production of excess; administration of **botulinum** toxin)

IT **Muscle**, disease
(spasm, blepharospasm; administration of **botulinum** toxin)

IT **Muscle**, disease
(spasm, hemifacial; administration of **botulinum** toxin)

IT **Muscle**, disease
(spasm; administration of **botulinum** toxin)

IT Arm
Leg
Nervous system, disease
(spasticity; administration of **botulinum** toxin)

IT Disease, animal
(speech disorder, spasmodic dysphonia; administration of
botulinum toxin)

IT Eye, disease
(strabismus; administration of **botulinum** toxin)

IT Nerve
(subdermal; administration of **botulinum** toxin)

IT Toxins
RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(tetanus; administration of **botulinum** toxin)

IT Eye
(tic; administration of **botulinum** toxin)

IT **Muscle**
(transfection of; administration of **botulinum** toxin)

IT Larynx
(vocal cord, spasmodic dysphonia; administration of **botulinum** toxin)

IT 7440-06-4, Platinum, biological studies 7440-33-7, Tungsten, biological studies 7440-57-5, Gold, biological studies
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(administration of **botulinum** toxin)

IT 93384-43-1, Botulin a 93384-44-2,
 Botulin b 93384-46-4, Botulin d
 93384-47-5, Botulin e 107231-12-9,
 Botulin 107231-13-0, Botulin cl
 107231-15-2, Botulin f 107231-16-3,
 Botulin g
 RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (administration of **botulinum** toxin)

IT 444957-06-6 444957-07-7 444957-08-8 444957-09-9 444957-10-2
 444957-11-3 444957-12-4 444957-13-5 444957-14-6 444957-15-7
 444957-16-8
 RL: PRP (Properties)

(unclaimed nucleotide sequence; administration of **botulinum** toxin)

IT 439904-18-4
 RL: PRP (Properties)

(unclaimed sequence; administration of **botulinum** toxin)

L63 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:516287 HCAPLUS

DN 135:71299

ED Entered STN: 18 Jul 2001

TI Method for treating dystonia with **botulinum** toxin types c to g

IN Aoki, Roger K.; Grayston, Michael W.; Carlson, Steven R.; Leon, Judith M.

PA Allergan Sales, Inc., USA

SO Pat. Specif. (Aust.), 25 pp.

CODEN: ALXXAP

DT Patent

LA English

IC ICM A61K038-48

ICS A61P021-00

CC 1-11 (Pharmacology)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	AU 727583	B2	20001214	AU 2000-16368	20000211
PRAI	AU 2000-16368		20000211		

AB The invention provides a method for treating dystonia, the method comprising the step of administering to a patient suffering from dystonia an effective amount of a **botulinum** toxin selected from the group consisting of the **botulinum** toxin types C, D, E, F and G, thereby alleviating a symptom of the dystonia and compns. useful for same.

ST **botulin** toxin dystonia spasticity therapy

IT Toxoids

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**botulin**; method for treating dystonia and spasticity with **botulinum** toxins)

IT Nervous system

(cholinergic, secretion controlled by; method for treating dystonia and spasticity with **botulinum** toxins)

IT Artery

(coronary, arteriole, sphincters, spasm; method for treating dystonia and spasticity with **botulinum** toxins)

IT Nervous system

(dystonia; method for treating dystonia and spasticity with **botulinum** toxins)

IT Spinal cord

(injury, spasticity from; method for treating dystonia and spasticity with **botulinum** toxins)

IT Tear (ocular fluid)
(lacrimation; method for treating dystonia and spasticity with **botulinum** toxins)

IT **Analgesics**
Sweat
(method for treating dystonia and spasticity with **botulinum** toxins)

IT Reflex
(palatal, swallowing disorders; method for treating dystonia and spasticity with **botulinum** toxins)

IT Intestine
(rectum, sphincters, spasm; method for treating dystonia and spasticity with **botulinum** toxins)

IT Mucus
(secretion; method for treating dystonia and spasticity with **botulinum** toxins)

IT **Muscle, disease**
(spasm; method for treating dystonia and spasticity with **botulinum** toxins)

IT **Muscle, disease**
(spasmodic torticollis of neck; method for treating dystonia and spasticity with **botulinum** toxins)

IT **Muscle relaxants**
(spasmolytics; method for treating dystonia and spasticity with **botulinum** toxins)

IT Nervous system
(spasticity; method for treating dystonia and spasticity with **botulinum** toxins)

IT Digestive tract
Gallbladder
Urinary tract
(sphincters, spasm; method for treating dystonia and spasticity with **botulinum** toxins)

IT Brain, disease
(stroke, spasticity from; method for treating dystonia and spasticity with **botulinum** toxins)

IT Nervous system
(tardive dyskinesia; method for treating dystonia and spasticity with **botulinum** toxins)

IT Joint, anatomical
(temporomandibular, spasm; method for treating dystonia and spasticity with **botulinum** toxins)

IT Headache
(tension headache; method for treating dystonia and spasticity with **botulinum** toxins)

IT Brain, disease
(trauma, spasticity from; method for treating dystonia and spasticity with **botulinum** toxins)

IT 93384-43-1, Botulin A 93384-44-2,
Botulin B 93384-45-3, Botulin C
93384-46-4, Botulin D 93384-47-5,
Botulin E 107231-15-2, Botulin F
107231-16-3, Botulin G
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(method for treating dystonia and spasticity with **botulinum** toxins)

TI **Botulinum-A** toxin for treating detrusor hyperreflexia in **spinal** cord injured patients: A new alternative to anticholinergic drugs? Preliminary results

AU Schurch, B.; Stohrer, M.; Kramer, G.; Schmid, D. M.; Gaul, G.; Hauri, D.

CS Swiss Paraplegic Centre, University Hospital Balgrist and Department of Urology, University Hospital, Zurich, 8008, Switz.

SO Journal of Urology (Baltimore) (2000), 164(3, Pt. 1), 692-697

CODEN: JOURAA; ISSN: 0022-5347

PB Lippincott Williams & Wilkins

DT Journal

LA English

CC 1-11 (Pharmacology)

AB We evaluated the efficacy of **botulinum-A** toxin **injections** into the detrusor **muscle** in patients with **spinal** cord injury, detrusor hyperreflexia and urge incontinence resistant to anticholinergic drugs. The purpose of treatment was to suppress incontinence episodes and increase functional bladder capacity. Included in our prospective nonrandomized study done at 2 clinics were 31 patients with traumatic **spinal** cord injury who emptied the bladder by intermittent self-catheterization. These patients had severe detrusor hyperreflexia and incontinence despite a high dose of anticholinergic medication. Pretreatment evaluation included a clin. examination and complete urodynamic investigation. Under cystoscopic control a total of 200 to 300 units of **botulinum-A** toxin were **injected** into the detrusor **muscle** at 20 to 30 sites (10 units per mL. per site), sparing the trigone. Clin. and urodynamic follow up was planned for 6, 16 and 36 wk after treatment. Patients were asked to decrease their intake of anticholinergic drugs during week 1 after treatment. Of the 21 patients 19 underwent a complete examination 6 wk after the **botulinum-A** toxin **injections**, and 11 at 16 and 36 wk. At the 6-wk follow up complete continence was restored in 17 of 19 cases in which anticholinergic medication was markedly decreased or withdrawn. Less satisfactory results in 2 cases were associated with an insufficient dose of 200 units **botulinum-A** toxin. After the **injections** overall mean reflex volume and mean maximum cytometric bladder capacity plus or minus standard deviation significantly increased from 215.8 ± 90.4 mL. to 415.7 ± 211.1 (p <0.016) and 296.3 ± 145.2 to 480.5 ± 134.1 (p <0.016), resp. There was also a significant decrease after treatment in mean maximum detrusor voiding pressure from 65.6 ± 29.2 cm. water to 35 ± 32.1 (p <0.016). Mean post-void residual urine volume catheterized at the end of the urodynamic examination increased significantly from a mean of 261.8 ± 241.3 mL. to 490.5 ± 204.8 (p <0.016). Moreover, autonomic dysreflexia associated with bladder emptying that manifested as a hypertensive crisis during voiding disappeared after treatment in the 3 patients with tetraplegia. Satisfaction was high in all successfully treated patients and no side effects were observed. Ongoing improvement in urodynamic parameters and incontinence was already present in all patients reevaluated at 16 and 36 wk. **Botulinum-A** toxin **injections** into the detrusor seem to be a safe and valuable therapeutic option in **spinal** cord injured patients with incontinence resistant to anticholinergic medication who perform clean intermittent self-catheterization. Successfully treated patients become continent again and may withdraw from or markedly decrease anticholinergic drug intake. A dose of 300 units **botulinum-A** toxin seems to be needed to counteract an overactive detrusor. The duration of bladder paresis induced by the toxin is at least 9 mo, when repeat **injections** are required.

ST **botulinum A** toxin detrusor hyperreflexia incontinence
spinal injury; hyperreflexia **botulinum A** toxin detrusor
incontinence **spinal** injury; detrusor hyperreflexia incontinence
botulinum A toxin **spinal** injury; **spinal** injury
botulinum A toxin detrusor hyperreflexia incontinence

IT Cholinergic antagonists

Neuromuscular blocking agents

(**botulinum**-A toxin for treating detrusor hyperreflexia in spinal cord injured patients)

IT Bladder

(hyperreflexia; **botulinum**-A toxin for treating detrusor hyperreflexia in spinal cord injured patients)

IT Bladder

(incontinence; **botulinum**-A toxin for treating detrusor hyperreflexia in spinal cord injured patients)

IT **Spinal cord**

(injury; **botulinum**-A toxin for treating detrusor hyperreflexia in spinal cord injured patients)

IT 93384-43-1, **Botulin A**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**botulinum**-A toxin for treating detrusor hyperreflexia in spinal cord injured patients)

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Abrams, P; BJU Int, suppl 1999, V83, P42
- (2) Annese, V; Muscle Nerve 1998, V21, P1540 HCPLUS
- (3) Anon; Arch Neurol 1991, V48, P1294
- (4) Bates, P; J Urol 1979, V121, P551 MEDLINE
- (5) Blaivas, J; Neurourol Urodyn 1982, V1, P51
- (6) Borodic, G; Plast Reconstr Surg 1989, V83, P546 MEDLINE
- (7) Bors, E; Urol Surv 1962, V12, P205 MEDLINE
- (8) Brading, A; The Physiology of the Lower Urinary tract 1987, P161
- (9) Brindley, G; Paraplegia 1994, V32, P795 MEDLINE
- (10) Carpenter, F; J Physiol 1967, V188, P1 MEDLINE
- (11) Chancellor, M; J Urol 1997, V158, P2097 MEDLINE
- (12) Chancellor, M; J Urol 1999, V162, P3 HCPLUS
- (13) Chandiramani, V; Br J Urol 1996, V77, P792 HCPLUS
- (14) Craft, R; Pain 1993, V55, P205 HCPLUS
- (15) De Ridder, D; J Urol 1997, V158, P2087 HCPLUS
- (16) de Seze, M; Neurourol Urodyn 1998, V17, P513 HCPLUS
- (17) Dickson, E; J Exp Med 1923, V37, P711
- (18) Dixon, J; The Physiology of the Lower Urinary Tract 1987, P3
- (19) Dolly, J; Semin Neurosci 1994, V6, P149 HCPLUS
- (20) Drachman, D; Neuropoisons: Their Pathophysiological Actions 1971, V1, P325
- (21) Ewing, R; Br J Urol 1982, V54, P689 MEDLINE
- (22) Fex, S; J Physiol (Lond) 1966, V184, P872 MEDLINE
- (23) Fowler, C; J Neurol Neurosurg Psychiatry 1994, V57, P169 MEDLINE
- (24) Holds, J; Invest Ophthalmol Vis Sci 1990, V31, P964 MEDLINE
- (25) Jankovic, J; Neurology 1993, V43, P834 MEDLINE
- (26) Lazzeri, M; J Urol 1997, V158, P2093 HCPLUS
- (27) Madersbacher, H; Incontinence 1999, P777
- (28) Maggi, C; Life Sci 1992, V51, P1777 HCPLUS
- (29) Molgo, J; J Physiol (Paris) 1990, V84, P152 HCPLUS
- (30) Naumann, M; Ann Neurol 1997, V42, P973 MEDLINE
- (31) Naumann, M; Lancet 1997, V349, P252 MEDLINE
- (32) Pasricha, P; Gastroenterology 1996, V110, P1410 HCPLUS
- (33) Paul, M; Can J Physiol Pharmacol 1980, V58, P88 HCPLUS
- (34) Pierson, S; Arch Phys Med Rehabil 1996, V77, P717 MEDLINE
- (35) Plevnik, S; Urology 1979, V14, P638 MEDLINE
- (36) Schmidt, R; Neurourol Urodyn 1988, V7, P585
- (37) Schurch, B; J Urol 1996, V155, P1023 HCPLUS
- (38) Scott, A; Trans Am Ophthalmol Soc 1981, V79, P734 MEDLINE
- (39) Simpson, L; Neuropoisons: Their Pathophysiological Actions 1971, V1, P303
- (40) Szolcsanyi, J; Pharmacol Exp Ther 1990, V255, P923 HCPLUS

DN 133:187976
 ED Entered STN: 07 Sep 2000
 TI Methods for treating **pain** with an intrathecally administered neurotoxin
 IN Aoki, Kei Roger; Cui, Minglei
 PA Allergan Sales, Inc., USA
 SO U.S., 20 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM A61K039-08
 NCL 424236100
 CC 1-11 (Pharmacology)
 Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6113915	A	20000905	US 1999-417195	19991012
	WO 2001026736	A2	20010419	WO 2000-US12597	20000509
	WO 2001026736	A3	20020321		
				W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	
				RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG	
	AU 2000049954	A5	20010423	AU 2000-49954	20000509
	BR 2000014710	A	20020618	BR 2000-14710	20000509
	EP 1237566	A2	20020911	EP 2000-932200	20000509
				R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL	
	JP 2003514594	T2	20030422	JP 2001-529797	20000509
	US 6235289	B1	20010522	US 2000-578097	20000525
	US 6333037	B1	20011225	US 2000-578181	20000525
	US 2001012828	A1	20010809	US 2001-797556	20010301
	US 6372226	B2	20020416		
PRAI	US 1999-417195	A	19991012		
	WO 2000-US12597	W	20000509		
	US 2000-578097	A1	20000525		
AB	Methods are disclosed for treating pain by intrathecal administration to a human patient of a therapeutically effective amount of a neurotoxin, e.g. botulinum toxin type A.				
ST	intrathecal neurotoxin pain treatment; botulinum toxin intrathecal pain treatment				
IT	Pain Pain Skin, disease Skin, disease (allodynia ; pain treatment with intrathecally administered neurotoxin)				
IT	Nervous system (central, cranial region; pain treatment with intrathecally administered neurotoxin)				
IT	Spinal cord (cervical; pain treatment with intrathecally administered neurotoxin)				
IT	Inflammation (inflammatory pain ; pain treatment with intrathecally administered neurotoxin)				
IT	Drug delivery systems				

(injections; pain treatment with intrathecally administered neurotoxin)

IT Drug delivery systems
(intrathecal; pain treatment with intrathecally administered neurotoxin)

IT Spinal cord
(lumbar; pain treatment with intrathecally administered neurotoxin)

IT Nerve, disease
(neuropathy, neuropathic pain; pain treatment with intrathecally administered neurotoxin)

IT Toxins
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(neurotoxins, **botulinum** toxins; pain treatment with intrathecally administered neurotoxin)

IT Analgesics
(pain treatment with intrathecally administered neurotoxin)

IT Spinal cord
(sacral region; pain treatment with intrathecally administered neurotoxin)

IT Spinal cord
(thoracic; pain treatment with intrathecally administered neurotoxin)

IT 93384-43-1, Botulin toxin A 93384-44-2,
Botulin toxin B 93384-45-3, Botulin toxin C
93384-46-4, Botulin toxin D 93384-47-5,
Botulin E 107231-15-2, Botulin F
107231-16-3, Botulin toxin G
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pain treatment with intrathecally administered neurotoxin)

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; WO 9415629 1994 HCPLUS
- (2) Anon; WO 9633273 1996 HCPLUS
- (3) Anon; WO 9807864 1998 HCPLUS
- (4) Anon; WO 9917806 1999 HCPLUS
- (5) Anon; http://www.wch.sa.gov.au/paedm/clintox/venoms_neurotoxins.html 2000
- (6) Bigalke, H; Brain Research 1985, V360, P318 HCPLUS
- (7) Bigalke, H; Naunyn-Schmiedeberg's Arch Pharmacol 1981, V316, P244 HCPLUS
- (8) Dixon, W; Ann Rev Pharmacol Toxicol 1980, V20, P441 MEDLINE
- (9) Dubuisson, D; Pain 1977, V4, P161 HCPLUS
- (10) Duc, C; The Journal of Comparative Neurology 1995, V356, P152 HCPLUS
- (11) Habermann, E; Experientia 1988, V44, P224 HCPLUS
- (12) Habermann, E; Journal of Neurochemistry 1988, V51(2), P522 HCPLUS
- (13) Habermann, E; Naunyn Schmiedeberg's Arch Pharmacol 1974, V281, P47 HCPLUS
- (14) Hagenah, R; Naunyn-Schmiedeberg's Arch Pharmacol 1977, V299, P267 HCPLUS
- (15) Johnson, E; J Toxicol-Toxin Reviews 1999, V18(1), P1 HCPLUS
- (16) Jung, H; Neuroscience 1997, V78(2), P469 HCPLUS
- (17) Kim, S; Pain 1992, V50, P355 MEDLINE
- (18) Mochida, S; Neuroscience 1995, V65(3), P905 HCPLUS
- (19) Nelson, P; Journal of Neurophysiology 1977, V40(5), P1178 MEDLINE
- (20) Osen-Sand, A; Nature 1993, V364, P445 HCPLUS
- (21) Pearce, L; Toxicon 1997, V35(9), P1373 HCPLUS
- (22) Ransom, B; Journal of Neurophysiology 1977, V40(5), P1132 MEDLINE
- (23) Ransom, B; Journal of Neurophysiology 1977, V40(5), P1151 MEDLINE
- (24) Ransom, B; Journal of Neurophysiology 1977, V40(5), P1163 MEDLINE
- (25) Sanchez-Prieto, J; Eur J Biochem 1987, V165, P675 MEDLINE
- (26) Sanders; US 5766605 1998
- (27) Simpson, L; Hospital Practice 1999, V34(4), P87 MEDLINE

(28) Tsuda, M; Br J Pharmacol 1999, V127(2), P449 HCPLUS
 (29) Wiegand, H; Naunyn-Schmiedeberg's Arch Pharmacol 1977, V298, P235 HCPLUS
 (30) Yaksh; Physiology & Behavior 1976, V17, P1031

L63 ANSWER 7 OF 7 HCPLUS COPYRIGHT 2004 ACS on STN
 AN 1956:79038 HCPLUS
 DN 50:79038
 OREF 50:14975e-g
 ED Entered STN: 22 Apr 2001
 TI The seat of botulism toxin action on the interneuronal connections of the **spinal** cord
 AU Mikhailov, V. V.
 CS I. V. Stalin 2nd Med. Inst., Moscow
 SO Arkhiv Patologii (1956), 18(No. 4), 29-34
 CODEN: ARPTAF; ISSN: 0004-1955
 DT Journal
 LA Unavailable
 CC 11H (Biological Chemistry: Pharmacology)
 AB Expts. were performed with cats. These were given botulism toxin type A **intramuscularly** and intravenously in doses of 6000-7500 M.L.D./kg. body weight. Paralysis of appendages appeared in 2-3 days. Reflex test procedures are described in detail. Damage to the reflex activity of the **spinal** cord developed as a result of the toxin administration. As the damage progressed simple and complex **spinal** reflexes of the paralyzed appendage disappeared with the simultaneous appearance of the usual contralateral reflexes in the non-paralyzed appendage. Botulism toxin, it seems, does not adversely affect the afferent and intermittent branches of the **spinal** reflex arc. Botulism toxin **injected** intravenously produced no noteworthy effects upon the chemoreceptor formations of the skin and of the striated **muscles**
 IT Toxins
 (of **Clostridium botulinum**, **spinal** cord
 reflex damage from)
 IT **Clostridium botulinum**
 (toxins of, **spinal** cord reflex damage from)
 IT **Spinal cord**
 (**Clostridium botulinum** toxin damage of)

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L120 ANSWER 1 OF 2 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
 on STN
 AN 2003016382 EMBASE
 TI Chronic pain secondary to disability: A review.
 AU Ehde D.M.; Jensen M.P.; Engel J.M.; Turner J.A.; Hoffman A.J.; Cardenas D.D.
 CS Dr. D.M. Ehde, Dept. of Rehabilitation Medicine, Box 359740, Harborview Medical Center, 325 9th Avenue, Seattle, WA 98104-2499, United States.
 ehde@u.washington.edu
 SO Clinical Journal of Pain, (2003) 19/1 (3-17).

Refs: 143
ISSN: 0749-8047 CODEN: CJPAEU
CY United States
DT Journal; General Review
FS 008 Neurology and Neurosurgery
017 Public Health, Social Medicine and Epidemiology
019 Rehabilitation and Physical Medicine
024 Anesthesiology
037 Drug Literature Index
LA English
SL English
AB Background: Until recently, very little has been written regarding chronic pain as a secondary problem in persons who already have a physical disability, despite the potential for pain to increase the negative impact of what may already be a very disabling condition. The purpose of this review is to summarize what is currently known concerning the nature and scope of chronic pain as a secondary condition to disability, specifically **spinal cord injury**, acquired amputations, cerebral palsy, multiple sclerosis, neuromuscular disease, and postpolio syndrome. Method: What is known concerning the frequency, severity, impact, and treatment of pain in these specific conditions is reviewed, as are the factors that contribute to, or are associated with, adjustment to chronic pain in these disability groups. The authors conclude with several research questions that emerge from this knowledge, the answers to which will contribute to the long-term goal of the reduction of pain and suffering in persons with disabilities. Conclusions: The existing literature clearly documents that many persons with disabilities experience chronic pain. Many questions remain unanswered regarding the scope, severity, and treatment of chronic pain in these groups.
CT Medical Descriptors:
*chronic pain: CO, complication
*chronic pain: DI, diagnosis
*chronic pain: DT, drug therapy
*chronic pain: TH, therapy
*physical disability
 spinal cord injury: EP, epidemiology
 amputation
 cerebral palsy: DI, diagnosis
 cerebral palsy: EP, epidemiology
 multiple sclerosis
 neuromuscular disease
 postpoliomyelitis syndrome
 disease severity
 morbidity
 physiotherapist
 acupuncture
 alternative medicine
 behavior therapy
 cognitive therapy
 relaxation training
 transcutaneous nerve stimulation
 phantom pain: CO, complication
 phantom pain: DT, drug therapy
 phantom pain: PC, prevention
 phantom pain: TH, therapy
 neuropathic pain: CO, complication
 neuropathic pain: DT, drug therapy
 neuropathic pain: TH, therapy
 epidural anesthesia
 drug efficacy
 social psychology
 human
 review

priority journal

Drug Descriptors:

trazodone: DT, drug therapy

mexiletine: DT, drug therapy

valproic acid: DT, drug therapy

amitriptyline: DT, drug therapy

opiate: DT, drug therapy

anesthetic agent: DT, drug therapy

baclofen: DT, drug therapy

baclofen: TL, intrathecal drug administration

botulinum toxin: DT, drug therapy

RN (trazodone) 19794-93-5, 25332-39-2; (mexiletine) 31828-71-4, 5370-01-4; (valproic acid) 1069-66-5, 99-66-1; (amitriptyline) 50-48-6, 549-18-8; (opiate) 53663-61-9, 8002-76-4, 8008-60-4; (baclofen) 1134-47-0

L120 ANSWER 2 OF 2 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN

AN 1998090034 EMBASE

TI Pain rehabilitation. 4. New frontiers in the rehabilitative management of pain.

AU Atchison J.W.; Taub N.S.; Cifu D.X.

CS Dr. J.W. Atchison, Univ. of Florida College of Medicine, Gainesville, FL 32610, United States

SO Archives of Physical Medicine and Rehabilitation, (1998) 79/3 SUPPL. 1 (S65-S73).

Refs: 62

ISSN: 0003-9993 CODEN: APMHAI

CY United States

DT Journal; General Review

FS 008 Neurology and Neurosurgery

019 Rehabilitation and Physical Medicine

033 Orthopedic Surgery

037 Drug Literature Index

LA English

SL English

AB This self-directed learning module highlights the new frontiers in the rehabilitative management of acute, subacute, and chronic pain. As part of the chapter on pain in the Self-Directed Physiatric Education Program for practitioners and trainees in physical medicine and rehabilitation, this article contains sections on complementary medicine, manual medicine, mind-body techniques, **spinal injections, nonspinal** injections, **spinal** cord stimulators, implantable pumps, intravenous medications, and surgical interventions.

CT Medical Descriptors:

*pain: DT, drug therapy

*pain: RH, rehabilitation

*pain: SU, surgery

*pain: TH, therapy

spinal cord stimulation

alternative medicine

acupuncture

herbal medicine

homeopathy

chinese medicine

pelvis pain syndrome: TH, therapy

leg pain: DT, drug therapy

cervicobrachial neuralgia: DT, drug therapy

low back pain: DT, drug therapy

chemonucleolysis

intervertebral disk hernia: DT, drug therapy

diskography

nerve block

human

clinical trial
epidural drug administration
review

Drug Descriptors:

*herbaceous agent: DT, drug therapy
*steroid: AD, drug administration
*steroid: DT, drug therapy
*lidocaine: AD, drug administration
*lidocaine: DT, drug therapy
*chymopapain: DT, drug therapy

*botulinum toxin a: AD, drug administration

*botulinum toxin a: DT, drug therapy

*analgesic agent: AD, drug administration

*analgesic agent: DT, drug therapy

methylprednisolone: CT, clinical trial

methylprednisolone: AD, drug administration

methylprednisolone: DT, drug therapy

RN (lidocaine) 137-58-6, 24847-67-4, 56934-02-2, 73-78-9; (chymopapain) 9001-09-6; (botulinum toxin a) 93384-43-1; (methylprednisolone) 6923-42-8, 83-43-2

=> => fil wpix

FILE 'WPIX' ENTERED AT 09:33:47 ON 07 JAN 2004

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FILE LAST UPDATED: 2 JAN 2004 <20040102/UP>

MOST RECENT DERWENT UPDATE: 200401 <200401/DW>

DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> NEW WEEKLY SDI FREQUENCY AVAILABLE --> see NEWS <<<

>>> SLART (Simultaneous Left and Right Truncation) is now available in the /ABEX field. An additional search field /BIX is also provided which comprises both /BI and /ABEX <<<

>>> PATENT IMAGES AVAILABLE FOR PRINT AND DISPLAY <<<

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:

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>>> ADDITIONAL POLYMER INDEXING CODES WILL BE IMPLEMENTED FROM DERWENT UPDATE 200403.

THE TIME RANGE CODE WILL ALSO CHANGE FROM 018 TO 2004.

SDIS USING THE TIME RANGE CODE WILL NEED TO BE UPDATED.

FOR FURTHER DETAILS: <http://thomsonderwent.com/chem/polymers/> <<<

=> d all abeq tech abex

L134 ANSWER 1 OF 1 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 2003-646101 [61] WPIX

DNC C2003-176812

TI Method of treating pain, involves administering agent sufficient to

paralyze muscles to intrinsic spinal muscles of mammal.

DC B04 P33

IN **LAMB, G B**

PA (ONEF-N) 1474791 ONTARIO LTD; (LAMB-I) LAMB G B

CYC 102

PI WO 2003063898 A2 20030807 (200361)* EN 28p A61K039-08 <--
 RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS
 LU MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
 RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA
 ZM ZW

CA 2369810 A1 20030730 (200361) EN A61K045-08
 US 2003143249 A1 20030731 (200361) # A61K039-08 <--

ADT WO 2003063898 A2 WO 2003-CA127 20030129; CA 2369810 A1 CA 2002-2369810
 20020130; US 2003143249 A1 US 2002-62954 20020131

PRAI CA 2002-2369810 20020130; US 2002-62954 20020131

IC ICM **A61K039-08**; A61K045-08
 ICS **A61H039-08**; A61K038-18; A61P023-00; A61P029-00

AB WO2003063898 A UPAB: 20030923

NOVELTY - Method of treating pain, involves administering an agent sufficient to paralyze muscles to the intrinsic spinal muscles of a mammal.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a kit for treating pain, which comprises a paralyzing agent, an injection syringe with needle (22) and an **acupuncture** needle (26) with injector system;

(2) an intrinsic muscle injection kit, which comprises **botulinum** toxin, saline for diluting the toxin, a syringe with needle for dispensing the saline into the toxin, a spinal **botulinum** injection needle, an **acupuncture** needle with spinal **acupuncture** injector system and injection syringe(s); and

(3) the method of treating spinal compression disorder, which involves inserting an **acupuncture** needle between vertebrae (12) to release a spinal scar and injecting **botulinum** toxin into intrinsic spinal muscles.

ACTIVITY - Analgesic; Muscular-Gen.

40 years old young male with back pain, sciatica, radiculopathy and compression neuropathy was injected with 4-6 mouse units of **Botulinum** toxin into the muscles at L4-S1. The patient had 2 year history of severe sciatica in right leg and severe low back pain and the CT scan of patient demonstrated 2 herniated disks of lumbar spine and spinal stenosis of the right lumbar spine causing compression of the L5 and S1 nerve roots on the right. After 2 weeks, the disk herniation and sciatica were completely treated and after 3 months, back pain or nerve root impingement was completely treated in patient.

MECHANISM OF ACTION - None given.

USE - For treating pain and also for treating disk (14) herniation, facet joint disease of the spine or spinal stenosis. For the relaxation of an intrinsic spinal muscle and the treatment of spinal compression.

ADVANTAGE - The muscle paralyzing agent is effectively used for treating disk herniation, facet joint disease of the spine or spinal stenosis and **botulinum** toxin is effectively used for treating herniated disc.

DESCRIPTION OF DRAWING(S) - The figure shows side view of Segment of the spine, which indicates the sites for injection.

vertebrae 12

disk 14

multifidus muscles 18

injection needle 22

acupuncture needle 26

Dwg. 2/3
 FS CPI GMPI
 FA AB; GI; DCN
 MC CPI: B04-B04M; B04-H06; B07-D05; B10-B02F; B14-C01; B14-J05; B14-N01
 TECH UPTX: 20030923
 TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Agent: The agent is **botulinum** toxin such as **botulinum** toxin type A or type B.
 Preferred Composition: The toxin is provided in a vial containing 25, 50, 70 or 100 units and comprises at least one of chains A to G or fragments.
 Preferred Method: The method of treating pain, involves administrating tissue growth factor to enhance healing and **botulinum** toxin to paralyze intrinsic spinal muscles. The method further comprises the administration of a tissue growth factor to enhance healing.
 Preferred Kit: The kit comprises local anesthetic such as Naropin, Xylocaine or Marcaine. The kit comprises tissue growth factor. The injection needle in the kit is 21/2-50-60 mm spinal injection needle having 20-25 gauge. The **acupuncture** needle is 21/250-60 **acupuncture** 0.25 mm-0.50 mm gauge needle with injector system. The injection syringe(s) is 1-4 cc/ml syringe with markings delineating dose line separations 5-20.
 ABEX UPTX: 20030923
 ADMINISTRATION - The toxin is administered as single injection or numerous injections between 1-30 mouse units/injection site.

=> => d his

(FILE 'HOME' ENTERED AT 08:24:47 ON 07 JAN 2004)
 SET COST OFF

FILE 'REGISTRY' ENTERED AT 08:24:59 ON 07 JAN 2004

		E BOTOX/CN
L1	1	S E3
		E BOTULIN/CN
L2	1	S E3
		E BOTULIN
L3	2156	S E3, E4, E7
		E CLOSTRIDIUM
L4	16633	S E3-E7
L5	2096	S L1-L3 AND L4
L6	2156	S L1-L3, L5
L7	14537	S L4 NOT L6

FILE 'HCAPLUS' ENTERED AT 08:26:45 ON 07 JAN 2004

		E ACUPUNCTURE/CW
		E ACUPUNCTURE/CW
L8	894	S E3
		E ACUPUNCTURE/CT
L9	894	S E3-E5
		E E3+ALL
L10	894	S L8, L9
		E ACUPUNCT
L11	1092	S E4-E13
L12	1092	S L8-L11
L13	1570	S L6
L14	9110	S L7
L15	98	S BOTOX
L16	4505	S BOTULINUM
L17	22469	S CLOSTRIDIUM
		E BOTULIN/CT
L18	1171	S E3-E8
		E E8+ALL

E E2+ALL
 L19 716 S E4
 L20 528 S E3
 L21 1774 S BOTULIN
 E CLOSTRIDIUM/CT
 L22 1646 S E39-E46
 E E39+ALL
 L23 80 S E7/BI
 3 S L12 AND L13-L23
 L24 2 S L24 AND PAIN
 E SPINE/CT
 E E3+ALL
 E E3+ALL
 L25 3325 S E9
 E E15+ALL
 L26 23756 S E4
 E E9+ALL
 L27 3882 S E5, E4+NT
 E LAMB G/AU
 L28 13 S E3, E5, E45, E47, E48
 L29 2 S L29 AND L12
 L30 2 S L29 AND L13-L28
 L31 1 S L29 AND L26-L28
 L32 2 S L30-L32
 L33 2 S L25, L33
 L34 91 S L26-L28 AND L12
 L35 164 S L26-L28 AND L13-L23
 L36 1 S L35 AND L36
 L37 67 S L35, L36 AND (?MUSCL? OR ?MUSCUL?)
 L38 31 S L38 AND (NEEDL? OR SYRING? OR INJECT?)
 SEL DN AN 1 5 7 31
 L39 4 S E1-E12 AND L39
 L40 5 S L34, L37, L40 AND L8-L40
 L41 48 S L35, L36 AND PAIN
 E PAIN/CT
 L42 11328 S E3-E14
 E E3+ALL
 L43 11167 S E3
 E E12+ALL
 L44 1494 S E11, E12, E10+NT
 E NOCICEPT?
 E NOCICEP?
 L45 8876 S NOCICEP?
 E ANALGES/CT
 E E4+NT
 E E1+ALL
 L46 9081 S E3
 L47 30593 S E5
 L48 412 S L12-L23 AND L43-L48
 L49 65 S L49 AND L26-L28
 L50 16 S L50 AND (?MUSCL? OR ?MUSCUL?)
 L51 28 S L50 AND (INJECT? OR SYRING? OR NEEDL?)
 L52 43 S L50 AND L12
 L53 2 S L51 AND L52, L53
 L54 1 S L54 NOT HEPARIN
 L55 72 S L42, L50-L53
 L56 70 S L56 NOT L41
 SEL DN AN 23 28
 L57 2 S E1-E6
 L58 7 S L41, L55, L58 AND L8-L48
 L59 72 S L56 AND (?SPINE? OR ?SPINAL?)
 L60 4 S L59 AND L60
 L61 7 S L59 AND (?SPINE? OR ?SPINAL?)
 L62

L63 7 S L61, L62
SEL HIT RN

FILE 'REGISTRY' ENTERED AT 09:00:26 ON 07 JAN 2004

L64 9 S E7-E15 AND L1-L7

FILE 'REGISTRY' ENTERED AT 09:00:49 ON 07 JAN 2004

FILE 'HCAPLUS' ENTERED AT 09:00:59 ON 07 JAN 2004

FILE 'MEDLINE' ENTERED AT 09:01:33 ON 07 JAN 2004

L65 9086 S E2-E37 OR ?ACUPUNCT?
E ACUPUNCTURE/CT
E E3+ALL

L66 178 S E3
E E5+ALL

L67 8175 S E4+NT

L68 9304 S L65-L67

L69 0 S L6

L70 343 S BOTOX

L71 152 S BOTULIN
E BOTULIN

L72 7400 S BOTULIN?
E BOTULINUM/CN

L73 4940 S E4, E16-E22
E BOTULINUM/CT
E E26+ALL

L74 1270 S E34+NT
E CLOSTRIDIUM/CT
E E4+ALL

L75 1640 S E21+NT

L76 14055 S E20+NT
E E26+ALL

L77 4839 S E26+NT

L78 17629 S E25+NT

L79 15 S L68 AND L70-L78
E SPINE/CT
E E3+ALL

L80 57988 S E8+NT
E SPINAL CORD/CT
E E3+ALL

L81 54450 S E4+NT
E SPINAL CORD/CT
E E4+ALL

L82 20724 S E18+NT
E SPINAL CORD/CT
E E47+ALL

L83 54219 S E4+NT
E HERNIA/CT
E E3+ALL

L84 23355 S E7+NT

L85 389 S L68 AND L80-L84

L86 678 S L70-L78 AND L80-L84

L87 0 S L85 AND L86

L88 190 S L85 AND (PAIN? OR ?NOCTICEP?)

L89 1 S L88 AND ?TOXIN?

L90 18 S L88 AND (?MUSCL? OR ?MUSCUL?)
E NEUROTOXIN/CT
E E10+ALL

L91 187368 S E8+NT

L92 35 S L91 AND L68

L93 23 S L92 NOT L79

FILE 'EMBASE' ENTERED AT 09:15:31 ON 07 JAN 2004

L94 2778 S L6
 L95 21907 S L15-L17, L21, L22
 E BOTULIN/CT
 E E4+ALL
 L96 2778 S E2
 E BOTULINUM/CT
 E E43+ALL
 L97 3420 S E1
 E E1
 L98 337 S E53
 L99 24 S E78
 L100 28 S E79
 L101 18 S E85, E93
 L102 27 S E109
 L103 51 S E126
 L104 23 S E138
 L105 10 S E153
 L106 6162 S BOTULIN? TOXIN?
 L107 21919 S L94-L106
 L108 32 S L107 AND ?ACUPUN?
 E ACUPUNCTURE/CT
 L109 7737 S E3+NT OR E4+NT
 E E3+ALL
 L110 31 S L107 AND L109
 L111 32 S L108, L110
 L112 7 S L111 AND (?SPINE? OR ?SPINAL? OR ?HERNIA?)
 SEL DN AN 3 7
 L113 2 S L112 AND E1-E2
 E HERNICA/CT
 E HERNIA/CT
 L114 22363 S E3+NT OR E11+NT
 L115 340 S E31+NT
 E SPINAL CORD/CT
 L116 32800 S E3+NT
 L117 3782 S E70+NT
 L118 62745 S E108+NT
 L119 4 S L114-L118 AND L111
 L120 2 S L113 AND L119
 L121 2 S L119 NOT L120

FILE 'EMBASE' ENTERED AT 09:24:13 ON 07 JAN 2004

FILE 'WPIX' ENTERED AT 09:24:20 ON 07 JAN 2004

L122 2007 S L15/BIX OR L16/BIX OR L17/BIX OR L21/BIX OR L23/BIX
 E BOTULIN
 L123 2 S E1, E2/BIX
 L124 466 S E3-E18/BIX
 L125 2081 S L122-L124
 L126 1 S L125 AND ?ACUPUN?/BIX
 L127 336 S A61K039-08/IC, ICM, ICS, ICA, ICI
 L128 2267 S L125, L127
 L129 2 S L128 AND ?ACUPUN?/BIX
 L130 2 S L126, L129
 E LAMB G/AU
 L131 1 S E3, E4 AND L128
 L132 1 S L126, L131
 L133 2 S A61H039/IC, ICM, ICS, ICA, ICI AND L128
 L134 1 S L132 AND L122-L133

FILE 'WPIX' ENTERED AT 09:33:47 ON 07 JAN 2004

FILE 'DPCI' ENTERED AT 09:34:06 ON 07 JAN 2004
E WO2003063898/PN
E LAMB G/AU

FILE 'BIOSIS' ENTERED AT 09:34:39 ON 07 JAN 2004

L135 729 S L6
L136 30150 S L15-L17, L21, L23
E CLOSTRIDIUM/BC
E BOTULIN/BC
L137 30157 S L135, L136
E CLOSTRIDIUM/ORGN
L138 677 S E3
L139 1107 S E46-E56
L140 30157 S L137-L139
L141 8 S L140 AND ?ACUPUNC?
E LAMB G/AU
L142 34 S E3, E24
L143 0 S L142 AND L140
L144 0 S L142 AND ?ACUPUN?

=>